

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21. (Canceled).

22. (Currently Amended) A method comprising:

~~determining a threshold number;~~

~~determining a threshold period of time;~~

~~monitoring making a first determination whether a number of previous consecutive reads of a hard drive (HD) satisfied by a non-volatile cache (NVC) of the HD is greater than or equal to a previously determined number;~~

~~monitoring making a second determination whether a period of time of previous consecutive HD reads satisfied by the NVC of the HD is greater than or equal to a previously determined period of time;~~

~~changing a power state of the HD based at least in part on the threshold number, the threshold period of time, the number of previous consecutive reads of the HD satisfied by the NVC of the HD and the period of time of previous consecutive HD reads satisfied by the NVC of the HD;~~

~~making a third determination whether a quantity of the NVC that would be available to service HD writes when the HD is spun down is greater than or equal to a previously determined quantity of memory space; and~~

if the third determination is true and if at least one of the first determination and the second determination is also true, then

spinning down the HD, and

servicing HD data transactions with the NVC while the HD is spun down.

23.-25. (Canceled).

26. (Currently Amended) The method of claim [[25]] 22, further comprising:

determining a threshold number;

determining a threshold period of time;

monitoring making a fourth determination whether, in another previously determined period of time, a number of transactions which were serviced by the NVC or the HD within a previous period of time equal to the threshold period of time is greater than or equal to another previously determined number; and

wherein the changing the power state of the HD is further based at least in part on the threshold number and the number of transactions serviced by the NVC or the HD within the previous period of time equal to the threshold period of time

if the fourth determination is true, then changing the power state of the HD.

27. (Previously Presented) The method of claim 26, wherein the changing the power state includes one of canceling a planned spinning down of the HD or spinning up the HD.

28. (Currently Amended) A machine readable storage medium having stored thereon a set of instructions which when executed cause a system to perform a method comprising:

determining a threshold number;

determining a threshold period of time;

monitoring making a first determination whether a number of previous consecutive reads of a hard drive (HD) satisfied by a non-volatile cache (NVC) of the HD is greater than or equal to a previously determined number;

monitoring making a second determination whether a period of time of previous consecutive HD reads satisfied by the NVC of the HD is greater than or equal to a previously determined period of time;

changing a power state of the HD based at least in part on the threshold number, the threshold period of time, the number of previous consecutive reads of the HD satisfied by the NVC of the HD and the period of time of previous consecutive HD reads satisfied by the NVC of the HD;

making a third determination whether a quantity of the NVC that would be available to service HD writes when the HD is spun down is greater than or equal to a previously determined quantity of memory space; and

if the third determination is true and if at least one of the first determination and the second determination is also true, then

spinning down the HD, and

servicing HD data transactions with the NVC while the HD is spun down.

29. -31. (Canceled).

32. (Currently Amended) The machine readable storage medium of claim [[31]] 28, the method further comprising:

determining a threshold number;

determining a threshold period of time;

monitoring making a fourth determination whether, in another previously determined period of time, a number of transactions which were serviced by the NVC or the HD within a previous period of time equal to the threshold period of time is greater than or equal to another previously determined number; and

wherein the changing the power state of the HD is further based at least in part on the threshold number and the number of transactions serviced by the NVC or the HD within the previous period of time equal to the threshold period of time

if the fourth determination is true, then changing the power state of the HD.

33. (Currently Amended) The machine readable storage medium of claim 32, wherein the changing the power state includes one of canceling a planned spinning down of the HD or spinning up the HD.

34. (Currently Amended) A system comprising:

a processor;

a non-volatile cache (NVC) coupled to the processor, the NVC to serve as a cache for a hard drive (HD) of the system; and

a machine readable storage medium having stored thereon a set of instructions which when executed cause the system to perform a method including,

determining a threshold number;

determining a threshold period of time;

monitoring making a first determination whether a number of previous consecutive reads of a hard drive (HD) satisfied by a non-volatile cache (NVC) of the HD is greater than or equal to a previously determined number;

monitoring making a second determination whether a period of time of previous consecutive HD reads satisfied by the NVC of the HD is greater than or equal to a previously determined period of time;

changing a power state of the HD based at least in part on the threshold number, the threshold period of time, the number of previous consecutive reads of the HD satisfied by the NVC of the HD and the period of time of previous consecutive HD reads satisfied by the NVC of the HD;

making a third determination whether a quantity of the NVC that would be available to service HD writes when the HD is spun down is greater than or equal to a previously determined quantity of memory space; and

if the third determination is true and if at least one of the first determination and the second determination is also true, then

spinning down the HD, and

servicing HD data transactions with the NVC while the HD is spun down.

35.-36. (Canceled)

37. (Currently Amended) The system of claim 34, the method further including

~~determining a second threshold number;~~

~~determining a second threshold period of time;~~

~~monitoring making a fourth determination whether, in another previously determined period of time, a number of transactions which were serviced by the NVC or the HD within a previous period of time equal to the second threshold period of time is greater than or equal to another previously determined number, and~~

~~wherein the changing the power state of the HD is further based at least in part on the second threshold number and the number of transactions serviced by the NVC or the HD within the previous period of time equal to the second threshold period of time~~

~~if the fourth determination is true, then changing the power state of the HD.~~

38. (Previously Presented) The system of claim 37, wherein the changing the power state includes one of canceling a planned spinning down of the HD or spinning up the HD.